

ABSTRACT OF THE DISCLOSURE

A CCD image sensor includes a first diode row comprised of photodiodes arranged in a row, a second diode row extending in parallel with the first diode row and comprised of photodiodes arranged in a row, photodiodes in the second diode row being staggered by a half pitch relative to photodiodes in the first diode row, a first charge transfer device transferring signal charges received from K-th photodiodes in the first diode row wherein K is an odd number, a second charge transfer device transferring signal charges received from L-th photodiodes in the first diode row wherein L is an even number, a third charge transfer device transferring signal charges received from K-th photodiodes in the second diode row, a fourth charge transfer device transferring signal charges received from L-th photodiodes in the second diode row, a charge-detecting capacitor receiving signal charges at different timings from one another from the first to fourth charge transfer devices, and a charge-detector detecting signal charges stored in the charge-detecting capacitor.